any of these faculties. Neither is it concerned in digestion or assimilation, nor does its size present any relation with the heart, the lungs, the muscles, the limbs, the vertebræ, the ribs, or any other organ, not even those of reproduction. As, however, its nervous connexions are principally with those parts which are exclusively subservient to the will, it is probable that it is concerned in the completion, and not in the commencement of the voluntary act. It is probable, also, that the principal crossing of impulses from one side to the other takes place in the medulla oblongata and the motor tracts of the brain. Some of the arrangements of its lobules may have reference to the paces and attitudes of different animals. The will, acting through the cerebral convolutions, sets in action certain muscles placed in proper directions; but the influence of the cerebellum is required for giving them steadiness amidst the alternations from one set to another, and especially when a slight change disturbs the centre of gravity, and until the balance is effectually restored by a subsequent act of the will operating on antagonist or other muscles. The cerebellum also constitutes an additional focus of nervous influence, and may, therefore, cooperate with the brain in increasing the vital powers, and imparting greater energy to the various functions of the body.

The author regards the corpus striatum as being a centre for conveying to the mind the perception of the motions of the limbs and of their different parts. He concludes with some remarks on the double crossings of the tracts of the centres of the nerves of the arms and legs, and the explanation given by these facts to various pathological phenomena.

7. "Nouveaux faits à ajouter à la Théorie de la Chaleur et à celle de l'Évaporation." Par Daniel Parat, Médecin à Grenoble. Communicated by the President.

The author commences by explaining his conception of the nature of heat, of which he gives the following definition:—"Mouvemens centraux obsculaires de la cohésion devenus extemporanément plus rapides, et dilatant de plus en plus tous les corps par une augmentation ainsi acquise de toutes les forces centrifuges." He adopts the theory that the evaporation of water in contact with air is a process identical with chemical solution, and adduces as evidence supporting his views various circumstances which are common both to evaporation and to the solution of a salt in water.

8. "On the nature and properties of Iodide of Potassium, and its general applicability to the cure of Chronic Diseases." By James Heygate, M.D., F.R.S.

The author has been led by his experience to estimate highly the medicinal properties of the iodide of potassium (which he prefers to the tincture of iodine) in various diseases, and thinks that when it is administered judiciously no deleterious effects are likely to arise from its use.

9. "Observations on the relation which exists between the Re-